

# **Lift maximization in the flow around a contour over a screen**

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## **Abstract**

The problem of lift maximization for a smooth contour of given length placed in a flow near a screen is analyzed. The distance between the contour and the screen is assumed to be given. Optimal contours are constructed, and the lift coefficient is derived as a function of the contour-screen separation. The results can be useful as accurate upper bounds for the lift coefficient of actual ekranoplan airfoils. © 2007 Pleiades Publishing, Ltd.

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## **Keywords**

Airfoil, Ekranoplan, Lift coefficient, Optimization